

Plan for In-person Research - Cossairt

Consult Office of Research Checklist for Developing a Return to In-person Research Plan for help with filling the template

Locations covered (list building and room numbers): CHB 317, 315, 313, 311, 304D/E, 228

COVID-19 Supervisor

Name: Brandi Cossairt

Contact Info: 626-622-0243; cossairt@uw.edu

A member of the group that can assume the COVID-19 Supervisor role in the PI's absence:

Name: Cecilia Johnson

Contact Info: 707-246-9952; mcjohn2@uw.edu

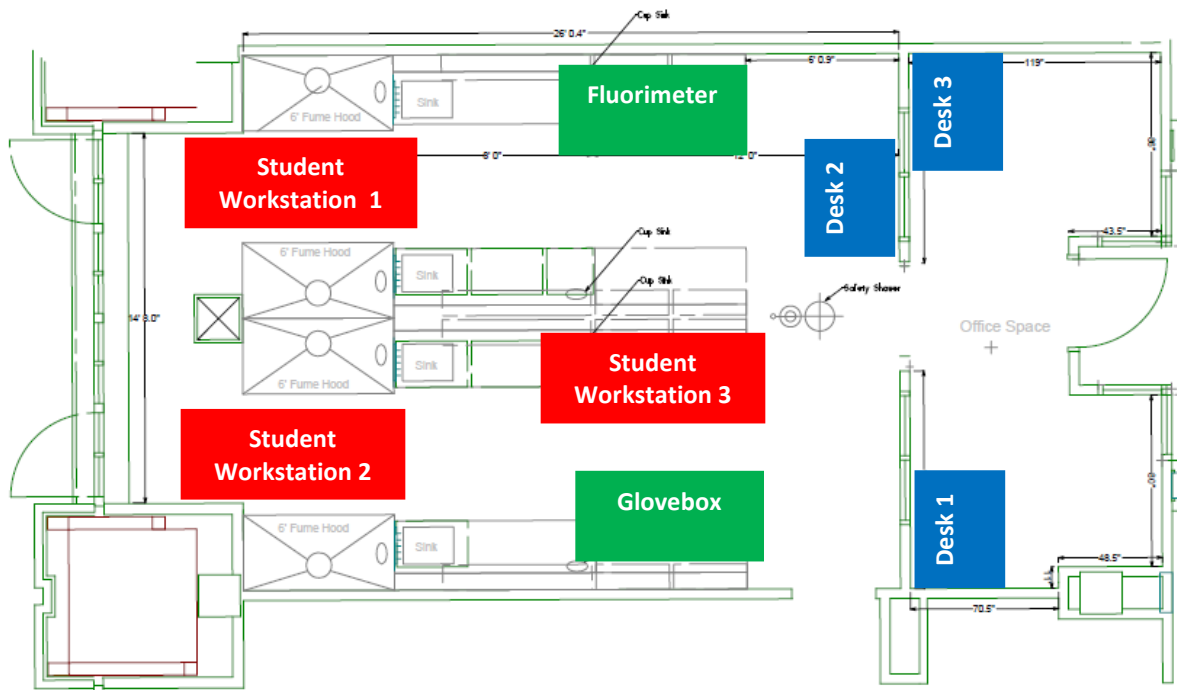
Names of people conducting in-person research:

Max Friedfeld, Ding-Yuan Kuo, Cecilia Johnson, Ian Murphy, Nayon Park, Madison Monahan, Forrest Eagle, Florence Dou, Micaela Homer, Ricardo Rivera-Maldonado, Emily Nishiwaki, Helen Larson, Hao Nguyen, McKenna Troje, Shenwei Wu

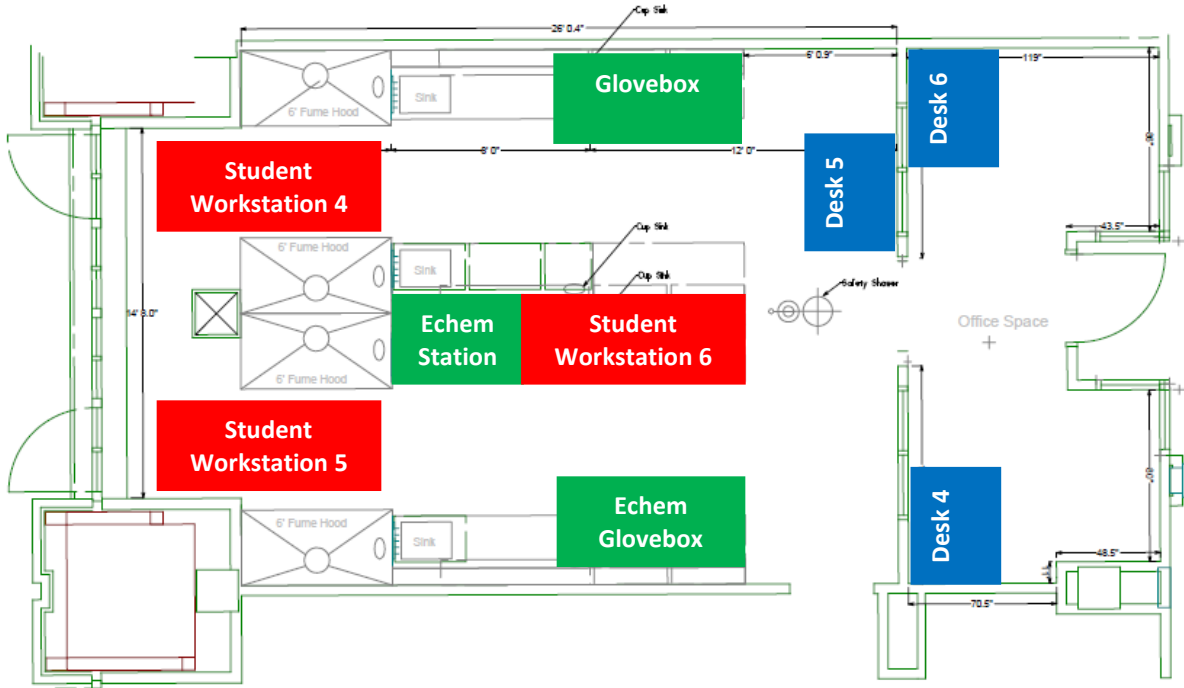
Social and Physical Distancing

1. Attach lab floor plan. Label all the room(s)/work area(s) and for each room/work area indicate the maximum occupancy:

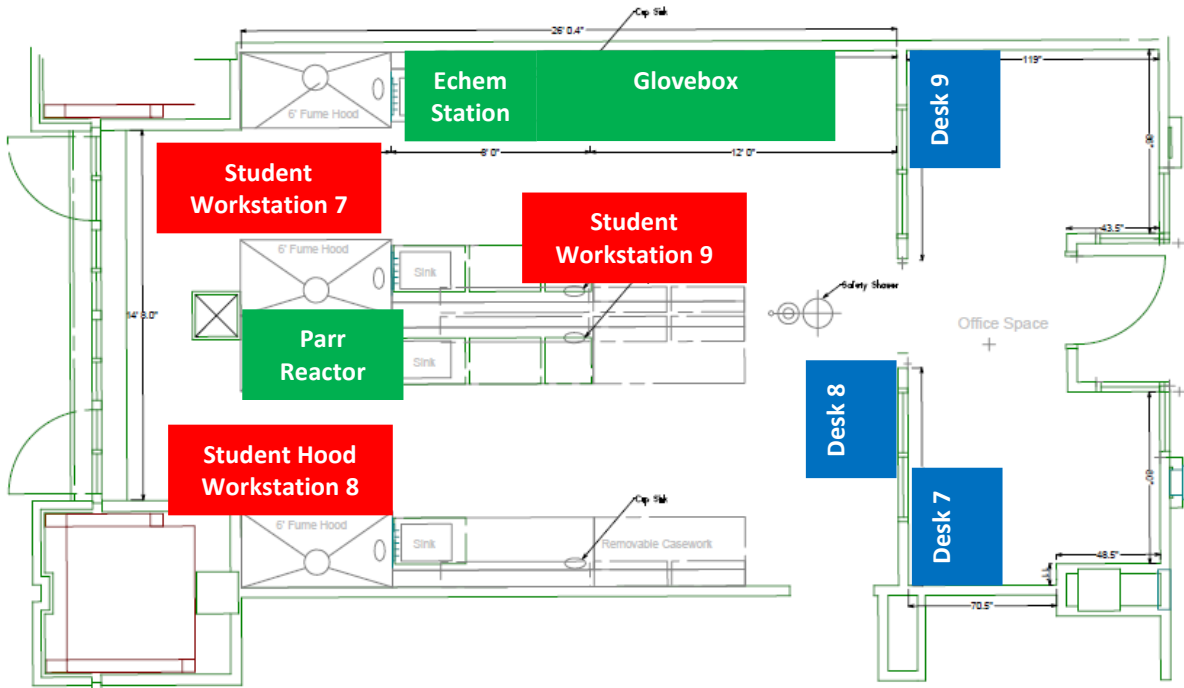
CHB 311 A, Max Occupancy 3



CHB 317A, Max Occupancy 3

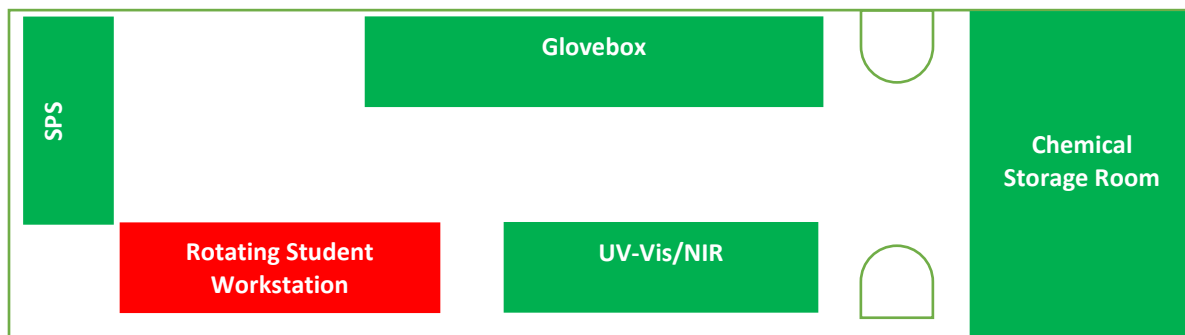


CHB 228A, Max Occupancy 3

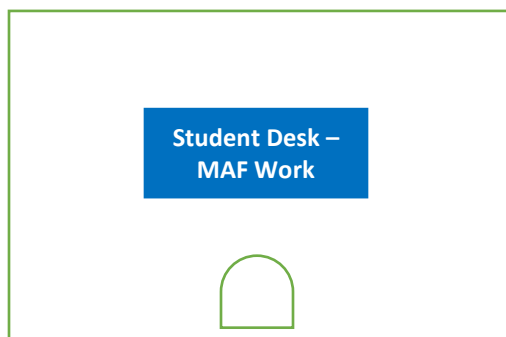


CHB 313A – Middle room containing glovebox, UV-Vis/NIR spectrometer, and SPS. Max Occupancy 1

CHB 313 – Chemical storage room. Max Occupancy 1



CHB 304E – Side Faculty Office – separated from Cossairt Office (CHB 304D) by closed sliding doors. Max Occupancy 1



2. Describe a lab usage scheduling plan that will minimize the number of people in the lab at any given time and how it will be implemented:

For approved researchers in the Cossairt lab, 4 lab spaces are designated - CHB 311A, 313A (middle room), 317A, and 228A - and 4 office spaces to spread across - CHB 311, 317, 228, and 304E (Brandi's side office; only 1 person permitted). We will work in shifts with no more than 9 researchers per shift. A maximum of 3 students are allowed to work simultaneously in the lab space. A maximum of 2 people may be in the CHB offices simultaneously. If all 3 students are doing desk work, a desk inside the laboratory must be used by one student.

Use the Cossairt Lab Google Sheet to sign up for your lab shift and required shared instrumentation.

https://docs.google.com/spreadsheets/d/1gLkO1brzqna5fgoBjckqEAsxPxuUk4jjzjfb_8esJY8/edit#gid=1546571503

If the occupancy is less than 9, then add your shift, indicate the hours that you will be in the lab, and describe your planned experimental workflow. All work that can be done at home (experimental planning, data workup and analysis, reading, writing) must be done at home. The Cossairt Lab Slack channel is available to facilitate group communication.

3. Describe specific rules and policies that will be implemented in your group to ensure social and physical distancing measures:

After arriving to the lab:

- Do not come to the lab unless you have logged your attendance in the Lab Occupancy Calendar **and** made your daily wellness attestation in Workday.
- Use the closest entrance to your office/lab, use automatic doors when possible to enter CHB outer doors. Wash your hands with soap and water upon entering the lab.
- Put on a pair of nitrile gloves and leave them on while in the lab. If you plan to exit the lab for the office area, remove your gloves and wash your hands.
- If you are the first person to arrive at the lab, you must disinfect all high-touch surfaces (such as door buttons and faucets) and all near-face surfaces (such as the transparent front shield of each of the glovebox and the fume hood sashes). See instructions below for disinfection.

- e. If at any time there are more than 9 people (3 per lab/office bay) in the Cossairt lab and office spaces in CHB, then notify Brandi Cossairt and leave the building.
- f. There should be no shared PPE – each researcher will be assigned their own goggles and lab coats.

While working in the lab

- g. All University-level and Departmental-level policies and guidelines must always be followed.
- h. **Always maintain 6 feet between researchers** unless it compromises safety. This pertains whether you are in the lab or office area.

Social distancing and hygiene in the CHB offices:

- 2 people allowed per CHB office on opposite sides of the office space. A third desk is available if/when needed inside the lab space as shown on the floorplans.
- 1 person allowed in CHB 304E office space.
- Any common item or surface used in the offices, including fridge handle, microwave, and the light switch must be wiped off with 70% ethanol or IPA solution before and after each use.
- To minimize the exposure, the light in the offices should be left on during the day. First person in should turn it on and the last person out for the day should turn it off.
- Eating while in the offices should be minimized as much as possible. Food items stored in the office fridges must be in a secondary container (such as a zip-lock bag or Tupperware), that can be wiped down with ethanol before inserting into the fridge. (No Aluminum-foil as it has too many creases.) Bottles and cans should also be wiped down. 70% EtOH or IPA spray bottle will be available in the offices.
- A spray bottle with 70% EtOH or IPA solution and paper towels are provided for each two-hood bay, the offices, and near gloveboxes.

Social distancing and hygiene in the CHB labs:

- 3 people allowed in the CHB 311, 317, and 228 lab spaces - they will use hoods on opposite sides of the lab. Back-to-back or shared hood use is not allowed.
- 1 person allowed per glove box, including the double glove box (Malcolm) in CHB 313A. Only one person is permitted to work in CHB 313A (hood, bench, glove box, UV-Vis, or SPS) at a time. People walking through 313A to get between 311A and 317A must announce themselves verbally and proceed only when the 313A occupant has responded to ensure adequate social distancing.
- 1 person allowed in the chemical stockroom CHB 313 at a time.
- To ensure that required 6 ft distance is maintained at all time, the use of common shared equipment (balances, fridges, solvent system, rotovap, echem equipment, UV-Vis, fluorimeter) has to be verbally announced to any person working near the equipment and used only once that person verbally acknowledged and approved the request. Similarly, moving through the passageways next to the gloveboxes must be coordinated with the people working the glove boxes.
- No research activities that require two researchers to be within 6 feet of one another for practical or safety reasons are permitted while social distancing guidelines remain in effect.
- Shared PPE (goggles and lab coats) is not permitted. Label yours with your name.
- Do not wear headphones/earbuds in both ears while in the lab. You must be able to hear anyone trying to get your attention.
- At the beginning and the end of every workday in the lab, each person must wipe off their bench, hood sash, and desk using 70% ethanol or IPA solution.
- Before and after every use of a glove box, the user will clean the glove box window with pure isopropanol.
- Before every use glove box gloves will be cleaned pure isopropanol.

Other distancing and hygiene considerations:

- To minimize the interaction with spaces and people outside of the lab, all items from the stockroom will be picked up by designated people at predetermined times twice a week. The pickup times on Monday and Thursday will be indicated on the group's google calendar.
 - Virtual signup procedures have replaced all physical procedures for equipment signup.
 - The use of in-lab workstations used to operate electrochemistry equipment and spectrometers must be done with a fresh pair of gloves.
 - Use your own chair. Wipe down arms and other high touch areas.
- i. **Face masks or face coverings are recommended as an additional precaution.** The CDC recommends, at a minimum, a cloth face covering or a personal mask if there is a potential to (even temporarily) come within 6 feet of another person.

Please note, however, that masks are not a substitute for maintaining > 6 ft distance at all times. You may use your own face covering if you wish. Personnel may remove their masks or face covering in the office space when there is a low likelihood of another person coming within 6 feet of them.

- j. The office area should be used only as a place to reside while periodically tending to active experiments. **If you are not tending an active experiment, then you should work remotely from your home.**
- k. If you begin experiencing symptoms while already in the lab, you must:
 - **Leave campus immediately and go home.**
 - Notify EH&S Employee Health Center at emphlth@uw.edu or 206-685-1026.
 - Contact your health care provider.
- l. When leaving the lab, remove gloves and wash hands with soap and water.
- m. Visitors (waste collection, solvent dispensing, shared instrumentation) are required to fill out the Department of Chemistry visitor log and attestation form hanging outside of each lab space before entering. A copy of the lab safety policy will accompany the log sheets. Visitors are required to review the safety policies so that social distancing and hygiene requirements are maintained.

4. Describe the tasks and activities that can be safely performed in the lab:

All standard experiments and procedures can be performed in the lab, if required social and physical distancing requirements (6 ft apart) can be met. Tasks that can be performed at home must be performed at home. Whenever possible, planning experiments, analyzing data, writing lab notebook notes, and similar activities should be done at home.

5. Describe the changes to the workspace(s) that have been made to ensure social and physical distancing and hygiene requirements:

- a. To minimize the interaction with spaces and people outside of the lab, all items from the stockroom will be picked up by designated people at predetermined times.
- b. Virtual signup procedures have replaced all physical procedures for equipment signup.
- c. Fabric covered chairs cannot be disinfected and should not be shared.
- d. The use of in-lab workstations used to operate electrochemistry equipment and spectrometers must be done with a fresh pair of gloves.

6. Describe how policies and measures have been communicated to group members (signage posted, e-mails, group meetings, etc):

All group members participated in formulating this safety policy. The policies were discussed at several group meetings conducted through Zoom. Signs reminding group members to wash hands regularly and to adhere to social distancing requirements are posted in the lab.

7. Describe how new members of your group will be trained. Please specify any training that can and should be done remotely, such as training for specific instruments, equipment, or software.

- a. Whenever possible, the training in common experimental techniques will be performed through video recordings and live video conferences.
 - A library of training videos available online (on sites like YouTube) for general laboratory techniques (vacuum traps, glovebox use, Schlenk line techniques, solvent system, etc.) will be made available to incoming students.
 - If videos are not available online, senior students will record an instructional video. These will be recorded by the senior student alone, through desk-mounted video recording tools (like smartphones) or a head-held camera (GoPro) that will be treated as a group resource/instrument, available to everybody in the group through cloud storage (google drive). Alternatively, the incoming student will observe the demonstration in real time through a virtual meeting.
- b. Training for lab instruments (glovebox, UV-Vis, Fluorimeter, Electrochemistry equipment, GC) will be done offline through pre-recorded training videos and/or live virtual meetings.
- c. Even after online training sessions, a more specific in-person training will be necessary at times. These training sessions will be performed observing COVID guidelines provided by the university: the two persons will always be required to keep a 6 ft distance, and will wear standard safety PPE, including protective face masks.
- d. Before performing new experiments independently, the new group members will discuss a detailed plan and a risk assessment with a senior student in a virtual meeting. The first time performing new techniques, the new student will wear a GoPro to allow a senior lab member to assess their mastery and ensure best practices are being followed.
- e. When doing experiments, there will always be a senior researcher present in the nearby lab or office space.
- f. In case of emergency, the second researcher will approach wearing standard PPE equipment, including a face mask (personal or provided by the department).
- g. Incoming students will not perform highly hazardous experiments that would normally necessitate the presence of a second researcher in the immediate vicinity. The hazardous part of such experiments will be performed by a senior researcher instead.

- h. Interpretation of the experimental results and troubleshooting will be performed online with help of senior students and/or the PI whenever possible.

Responding to Illness

1. Describe how the University of Washington requirements for symptom assessment and attestation will be fulfilled:

Before starting to come to the lab every member of the group must login to Workday <https://isc.uw.edu/> and sign-off that they are healthy.

Here is the list of symptoms that UW instructs us to look for:

[COVID-19 Symptom Attestation for Working On-Site](#)

Since your last day of work, or since your last visit to a University facility, have you experienced any of the following symptoms:

- a. A new fever (100.4 F or higher) or a sense of having a fever?
- b. A new cough that you cannot attribute to another health condition?
- c. New shortness of breath that you cannot attribute to another health condition?
- d. A new sore throat that you cannot attribute to another health condition?
- e. New muscle aches that you cannot attribute to another health condition or that may have been caused by a specific activity, such as physical exercise?
- f. New respiratory symptoms, such as sore throat, runny nose/nasal congestion, or sneezing, that you cannot attribute to another health condition?
- g. New chills or repeated shaking with chills that you cannot attribute to another health condition?
- h. New loss of taste or smell that you cannot attribute to another health condition?

2. Describe the plan in case someone in the group develops COVID-19 symptoms (the plan should be consistent with the university developed recommendations found at <https://www.washington.edu/coronavirus/faq/>):

If at work, they must immediately go home and contact their health care provider. If at home, they are instructed to contact their health provider. They are instructed to consult <https://www.washington.edu/coronavirus/faq/> for the course of action recommended by the University of Washington in the case of the suspected case of COVID-19.

In case a group member tests positive for COVID-19 or their health care provider suspects a case of COVID-19, they are instructed to immediately contact **EH&S Employee Health Center at 206-685-1026** or emphlth@uw.edu.

It is also suggested to members of the group, that if they feel comfortable with sharing the information, they could contact their PI and/or Paul Miller (paulmil@uw.edu) (206) 543-1612).

Cleaning and Disinfecting Your Workplace

1. Describe cleaning and disinfection protocols for high-touch surfaces, shared equipment, and common areas in the lab, including who is responsible:

Increase the frequency of cleaning and disinfecting, **focusing on high-touch surfaces**, such as buttons, handrails, tables, faucets, doorknobs, shared equipment, and shared keyboards. Increased frequency of cleaning and disinfecting with attention to these areas helps remove bacteria and viruses, including the novel coronavirus.

- At the beginning and the end of every workday in the lab, each person must wipe off their bench, hood sash, and desk using 70% ethanol or IPA solution.
- Any common item or surface used in the offices, including fridge handle, microwave, and the light switch must be wiped off with 70% ethanol or IPA solution before and after each use.
- To minimize the exposure, the light in the offices should be left on during the day. First person in should turn it on and the last person out for the day should turn it off.
- Eating while in the offices should be minimized as much as possible. Food items stored in the office fridges must be in a secondary container (such as a zip-lock bag or Tupperware), that can be wiped down with ethanol before inserting into the fridge. (No Aluminum-foil as it has too many creases.) Bottles and cans should also be wiped down. 70% EtOH or IPA spray bottle will be available in the offices.
- Before and after every use of a glove box, the user will clean the glove box window with pure isopropanol.
- Before every use glove box gloves will be cleaned pure isopropanol.

- A spray bottle with 70% EtOH or IPA solution and paper towels are provided for each two-hood bay, the offices, and near gloveboxes.

The CDC has provided a list (in conjunction with the EPA) of cleaning solutions effective for killing SARS-Cov-2 (the virus that causes COVID-19) at:

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

- **70% alcohol / 30% water solutions are the preferred disinfectant for the Cossairt lab.** Please use either isopropanol or ethanol for the alcohol. Note that alcohols may extract fat from the skin and cause dermatitis after repeated or prolonged use. Further, inhalation of concentrated alcohol vapor may cause irritation of the respiratory tract and effects on the central nervous system. Therefore, always use gloves when disinfecting surfaces and be sure that the space is well ventilated. Our MoES labs are well ventilated so long as the air handling system is operational.
- In accordance with [UW's guidance on safe cleaning solutions](#), avoid using sodium hypochlorite (bleach) and quaternary ammonium compounds, when possible. Although they are approved for killing SARS-CoV-2, these ingredients *may* cause or exacerbate asthma. However, they may be used if other disinfection products are not available.
- Let alcohol-based disinfectants stay glistening wet on the surface or air dry for 5 min, then wipe dry with paper towel. For keyboards, first moisten a chemwipe or paper towel with the alcohol solution then wipes across the keyboard and mouse.

Encouraging Good Hygiene

1. Describe measures in your group that will promote and enable uniformly good hygiene practices:

- Practice good hand hygiene after cleaning (and Always!):
 - a. Wash hands often with soap and warm water for at least 20 seconds (see flyer below).
 - b. If soap and warm water are not readily available, use an alcohol-based hand sanitizer that contains at least 70% ethanol.



- Every time a person enters the lab, they should wash their hands with soap and water. Signs reminding people to wash their hands are placed at the lab entrance
- Every time a person takes their gloves off, they should wash their hands.
- All office and lab spaces have been equipped with disinfecting wipes, sanitizer, and/or 70% IPA solutions that are to be kept stocked.
- Preparation and consumption of food in the office spaces and the department should be kept to minimum and avoided whenever possible.

2. Describe the lab policy for wearing a mask and other protective equipment:

- Wearing of a mask is discouraged while working with pyrophoric and flammable materials in the hood. In other situations, while in the lab, the group members are strongly encouraged to wear a mask. PPE required for the work in group's lab space (lab coat and glasses) is mandatory.
- Wearing a mask is required while working in a glove box.
- Before putting a mask on, taking it off, or adjusting it, take the gloves off and wash your hands with soap and water.
- When taking a mask off, do not touch the front of the mask.
- If using a reusable cloth mask, the mask must not be reused until after it has been laundered. Treat it as contaminated until then.
- Policy on wearing gloves in the lab:
 - While working in the lab everyone must wear gloves.
 - Do not touch your face, hair, phones, headphones, computers, or other private items while wearing gloves.
 - Gloves should be changed anytime they become contaminated or at the end of a specific operation (for example setting up an experiment). Gloves should be disposed in your personal trash box.
 - All shared equipment except glove boxes should be used only while wearing gloves.
 - All shared chemicals and reagents should be handled with gloves.
 - Every time a person takes their gloves off, they should wash their hands.
 - You should place used gloves in your own trash box.
 - A fresh pair of gloves must be used every time you use a glove box.
 - The use of gloves is not allowed in the breakroom or elsewhere outside of the lab unless specified by the departmental policies.

General

1. Provide a plan for training group members in COVID-19-related policies and procedures described in this document, including how the training will be documented:

All group members participated in determining the group policies related to COVID-19. Group policies and departmental policies have been discussed and reviewed at the zoom group meeting on 05/28/2020. Any changes required by the department will be reviewed at an additional zoom group meeting. All group members have been provided with a digital copy of the group policy and the department policy and have signed a statement by which they confirm that they have read, understood, and will comply with the policies. A paper copy of the policies will be placed in the groups safety manual and another copy will be filed with the department.

2. Describe the plan for visitors. The plan should address symptom monitoring, attestation, and visitor log maintenance for all the visitors. (Visitors are defined as those who do not normally use these spaces, including both UW and non-UW personnel):

All visitors must contact a member of a research group and organize a handoff of chemicals, solvents, or small instruments. All visitors must contact a lab member to schedule a visit in case they need to use an instrument located in our lab. Time for all visit and visitor's contact information will be saved in an online log (part of the group calendar). A sign informing visitors of the social distancing requirements are posted at the lab entrance.

3. Describe how group members will be informed of COVID-19-related policies for shared facilities and common spaces in the department:

Policies for departmental shared facilities and shared spaces will be discussed at group meetings and will be shared with all group members by e-mail; before returning to work, each lab member must confirm that they have read and fully agree to these policies and will follow them.

4. Describe any other COVID-19 related policies implemented in your group:

N/A

I confirm that I have read, understood, and intend to follow this plan.

Name: Max Friedfeld

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Ding-Yuan Kuo

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Mary Cecilia Johnson

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Ian Murphy

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Madison Monahan

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Name: Nayon Park

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Name: Emily Nishiwaki

Date: May 7, 2021

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Name: Helen Larson

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Hao Nguyen

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: McKenna Troje

Date: May 7, 2021

I confirm that I have read, understood, and intend to follow this plan.

Name: Shenwei Wu

Date: May 7, 2021